

Product datasheet for **MG200975**

Magoh (NM_010760) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Magoh (NM_010760) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Magoh
Synonyms: Mago-m; Mos2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200975 representing NM_010760
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGAGTGACTTTTACCTGCGTTACTACGTGGGCCACAAAGGCAAGTTCGGTCATGAGTTCCTGGAGT
 TTGAATCCGACCTGACGGTAAATTGCGATACGCCAACACAGCAATTACAAAAATGACGTCATGATCAG
 GAAAGAGGCTTATGTGCATAAAAGTGTGATGGAAGAGTTAAAGAGAATTATTGATGACAGTGAAATCACC
 AAAGAAGATGATGCTCTGTGGCCCCCTCTGATCGCGTGGGCCGGCAGGAGCTTGAAATTGTCATTGGAG
 ATGAACACATTTCTTTCACAACATCAAAAATTGGTTCCTTATTGATGTCAACCAGTCCAAGGATCCGGA
 AGGCTTGGCAGTATTTTATTATCTGTCCAGGACCTGAAGTGTTAGTCTTCAGTCTGATTGGATTACAC
 TTCAAGATTAACCAATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200975 representing NM_010760
 Red=Cloning site Green=Tags(s)

MESDFYLRYYVGHKGFHEFLFEFRPDGKLRVANNSNYKNDVMIRKEAYVHKSVMEELEKRIIDDSEIT
 KEDDALWPPDRVGRQLEIVIGDEHISFTTSKIGSLIDVNQSKDPEGLRVFYLVQDLKCLVFLSLIGLH
 FKIKPI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

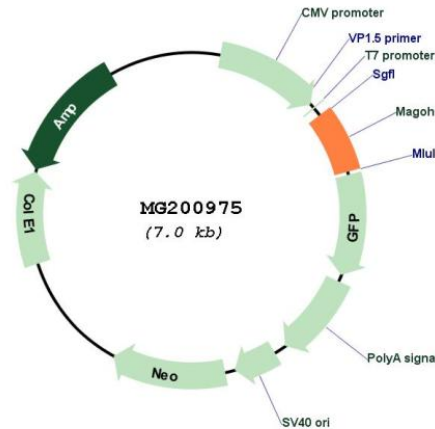


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Cloning Scheme:



Plasmid Map:



ACCN: NM_010760

ORF Size: 438 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_010760.2, NP_034890.1</u>
RefSeq Size:	613 bp
RefSeq ORF:	441 bp
Locus ID:	17149
Cytogenetics:	4 50.18 cM
Gene Summary:	Required for pre-mRNA splicing as component of the spliceosome. Plays a redundant role with MAGOHB as core component of the exon junction complex (EJC) and in the nonsense-mediated decay (NMD) pathway. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. The EJC marks the position of the exon-exon junction in the mature mRNA for the gene expression machinery and the core components remain bound to spliced mRNAs throughout all stages of mRNA metabolism thereby influencing downstream processes including nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense-mediated mRNA decay (NMD). The MAGOH-RBM8A heterodimer inhibits the ATPase activity of EIF4A3, thereby trapping the ATP-bound EJC core onto spliced mRNA in a stable conformation. The MAGOH-RBM8A heterodimer interacts with the EJC key regulator PYM1 leading to EJC disassembly in the cytoplasm and translation enhancement of EJC-bearing spliced mRNAs by recruiting them to the ribosomal 48S preinitiation complex. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes); specifically inhibits formation of proapoptotic isoforms; the function is different from the established EJC assembly.[UniProtKB/Swiss-Prot Function]